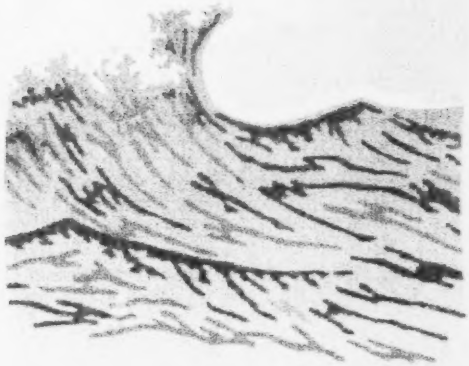
FISHERIES RESOURCE CONSERVATION COUNCIL

2003 / 2004 Conservation Requirements for 2J3KL Cod Stocks

Report to the Minister of Fisheries and Oceans



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LETTER TO THE MINISTER

103-07270/

March 27, 2003

The Honourable Robert G. Thibault, P.C., M.P.
Minister of Fisheries and Oceans
200 Kent Street
Ottawa, ON K1A 0E6

Dear Minister,

In your letter addressed to the FRCC dated Dec. 10, 2002, you stated the view that "it is time to consider a substantial change in the way that we manage and utilize these resources, not only in the short, but also in the long-term". We have reviewed the most recent science, and conducted extensive consultations with industry and fishermen on the current state and future of the Gulf and Northern cod stocks, and as a result we concur with your views on the need for a major shift in management approaches. Therefore, we are advising that you fundamentally revamp the way that the Northern cod is managed. The recommended changes have far reaching ramifications, including how and what science should be done.

A major recommended change is the formation of Coastal Fisheries Councils with designated operational decision making powers close to the fisheries, and with powers of stewardship to regulate local harvests and by-catches, and deal with local issues of enforcement. The FRCC believes that such local Councils can help guide the fisheries back to a state of health.

The Northern cod is in a state of crisis. Although the coastal sub-stock is in much better condition, the overall biomass level of the stock is only a few percent of what it was historically. Hence, we are recommending that your department enter a 5-year period of crisis management, with different approaches for the Bank and coastal sub-stocks. During this period, a primary goal would be to reduce all forms of mortality to the lowest practical levels. **It must be stated in the clearest possible terms that the FRCC does not believe that a simple closure of the existing index fisheries will accomplish this goal, or result in a rebuilding of the stock.** There are several other key issues that must be addressed for both the coastal and Bank sub-stocks. For example, there are key problems with seal predation, a lack of capelin, the exposure of the Bank sub-stocks to the shrimp fishery other by-catch both domestic and foreign, and inadequate research in several areas.

The future of the Northern cod depends more on the growth of the Bank sub-stocks than on the historically much smaller coastal sub-stock(s). The FRCC believes that the Bank sub-stocks must receive increased protection, even if there is no absolute proof that such protection will be successful. We are in a crisis and lack of absolute proof can be no argument for lack of action. Closing offshore areas to fishing will primarily affect the shrimp and turbot fisheries, but the effects are thought to be relatively minor. The potential benefits to cod are substantial. Seismic activities within these areas should also be prohibited.

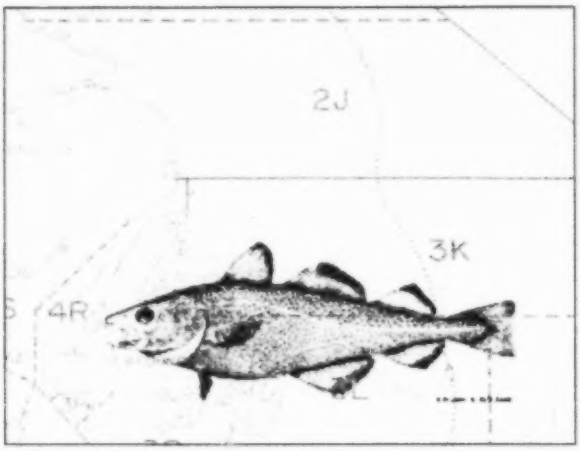
The substantial changes that we are recommending will require changes in the way that your department conducts management, and also science. We advise you to set these changes into motion as soon as possible, and support them with any necessary funding.

In closing, the crisis with the Northern cod is an icon not only for the devastated fisheries of Atlantic Canada, but also for the failures of past science and management. We are at a great cross-roads now, and we will all need courage and conviction to make the changes necessary to rebuild our stocks and our fisheries. You have expressed the view that substantial changes are required, and we have agreed fully. We stress that the full suite of recommendations should be followed. There is no room for half-measures. In closing, we wish you every success and hope that you will be able to implement the changes that we have recommended. We are optimistic that if this can be done, we will emerge from the present crisis.

Best wishes,

Fred Woodman

Cod - 2J3KL



Perspective

The northern cod (NAFO divisions 2J3KL) was historically the largest groundfish resource of the Northwest Atlantic. Its decline has become an icon for fisheries crises in Newfoundland and Labrador, in Canada, and worldwide. The northern cod comprises a stock complex that inhabits an area of approximately 400,000 square km from the Grand to Hamilton Banks and their adjacent coasts. The larger Bank sub-stocks over-wintered and spawned on the Banks and shelf, then migrated in spring and summer to feeding areas in coastal waters. Smaller sub-stock(s) over-wintered and spawned in the Bays and migrated along the coast. The most important food species of the full stock complex was capelin. The productivity of northern cod is lower than cod stocks inhabiting warmer waters and fishing rates must also be lower.

The northern cod has supported a commercial fishery since the 16th century. A traditional small vessel fishery was prosecuted until the late 19th century. Major changes in technology occurred in the 20th century, especially in the 1960s, when large otter trawlers began fishing the dense over-wintering and spawning aggregations in offshore waters. Historical landings were 150-300,000 tonnes per year but increased substantially in the 1960s (maximum >800,000 t). The stock subsequently declined rapidly. After the extension of jurisdiction to 200 miles in 1977,the stock increased until the mid-1980s but has since declined to a very low level (1-3% of historical levels).

The northern cod is in a critical state. The FRCC believes that without crisis management, the stock will not recover. After 11 years of a Canadian fishing moratorium, both scientific data and fishermen's knowledge indicate little rebuilding and excessive mortality. Past measures implemented by DFO have not spurred rebuilding. The reasons are complex, and include low spawning stock levels, unfavourable ecosystem processes (oceanographic conditions, seal predation and poor feeding on capelin), and fishing. The Smith Sound cod in Trinity Bay has been the sole exception to an otherwise bleak picture. **The FRCC notes that key past recommendations, in particular on reducing seal and fishing mortality and closing areas to fisheries on the Banks, have not been implemented.**

The FRCC long-term objective for the northern cod remains: to rebuild the sub-stock structure and the fisheries over the full range of the former stock, both in the coastal area and on the shelf. It must be understood that even under crisis management, the pace of rebuilding is highly uncertain, but most likely any significant rebuilding will take decades. The shorter-term objective is to rebuild the spawning stock to 150,000 t, from a current level of approximately 20,000-40,000 t.

The FRCC believes that a new and comprehensive rebuilding strategy based on collaboration and partnership between DFO, Industry and the coastal communities is required to improve the likelihood of rebuilding the northern cod. This strategy puts operational decision-making affecting fisheries as close as possible to those involved in the fisheries, involves resource users in conservation, and builds capacity for resource users to take on new responsibilities for their own future. A key element of this plan is an enhanced "buy-in" of fishers and communities to conservation by enhancing their stake in present and future fisheries.

A workable rebuilding strategy must also address both the immediate crisis and the long-term objective. Half or partial measures that do not address the full spectrum of problems are unlikely to be effective. All strategies should be objective-oriented, with a clear stated objective towards rebuilding the stock, and be subject to review and evaluation of the progress towards that goal. **It is important to stress that closing the existing index fisheries will of itself be unlikely to rebuild the northern cod. A far more comprehensive approach is necessary.**

The scientific understanding of the stock structure of northern cod is still imperfect, but has advanced in recent years. Genetic studies suggest that Bank sub-stocks interbreed only marginally with the coastal sub-stock. There is little evidence of cross-shelf range

Figures are in 000t

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000/01	2001/02	2002/03*
TAC	266	266	256	266	235	199.3	190			No directed fishery				4	9	7	5.6	5.6
Catch	236.1	274.7	245	268.7	254.1	233.6	155	28.3	4.1	1.3	1.7	0	0.07	3.5	8.2	4.7	4.9	3.5

*Catch as of January 3/2003

1. Above figures include Reported Landings extracted from the Integrated Fisheries Management Plan Atlantic Groundfish (IFMP)

expansion or migration over the past decade. In the 2003 SSR, the coastal sub-stock is treated as being fully separate.

The FRCC notes that the present crisis dictates that we recognize that the state of the Bank and coastal sub-stocks differs and solutions require a mix of strategies. The intent of this report is to provide the building blocks for a rebuilding plan.

Problems

Bank Sub-stocks

- Very low spawning biomass
- Low recruitment
- High mortality rates (exposure to seals)
- Exposure to by-catch from other fisheries
- Exposure to industrial activities (seismic surveys)
- Lack of capelin
- Potential for foreign overfishing

Coastal sub-stock

- Declining biomass
- Low recruitment
- High mortality rates (exposure to seals, fisheries, poaching)
- Spatial concentration around Trinity Bay

Bank Sub-stocks

Bank components remain in a highly depleted state (2-3% of 1980s biomass). **The bank components are the most-probable source of any large-scale resurgence of the northern cod.** Recruitment levels cannot be precisely measured but are very low, with some signs of modest resurgence in the past few years. However, mortality rates are excessively high (to 80% per year for 5 year old cod), resulting in very few fish older than 5 years. The causes of the high mortality may be seal predation, poor condition, and fishing (Canadian by-catch and that from foreign fishing outside the EEZ were both cited by the ZAP summary). Liver and reproductive condition is low, especially to the north. There are few capelin in the diet. Capelin is an essential dietary item for maximum reproduction. Although there has been a legal moratorium on directed commercial cod fishing, the shrimp fishery operates on the spawning and juvenile areas with otter trawls. The FRCC recognizes that improvements in grate technology have decreased by-catch, but there remains a strong likelihood that trawling interferes with behavior, particularly during the spawning season, and results in some catch of juvenile cod. There is also a gillnet fishery for Greenland halibut. **Stock growth will only occur if recruitment increases and all forms of mortality are reduced.**

The FRCC believes that conservation measures in addition to the present moratorium are required to rebuild Bank components of Northern cod. At present, there are at least 2 spawning and adjacent juvenile areas with building concentrations of young fish: 1) Hawke Channel in 2J; 2) Tobin's Point-Bonavista Corridor on the 3K-3L line. The FRCC believes that large portions of these areas should be protected from all invasive activities, and that their exact location and dimensions be determined by DFO after consultations with science and Industry.

Hence, for the Bank sub-stocks for the next 5 years:

1) **The FRCC recommends that to reduce fishing mortality, the moratorium on fishing the shelf and Bank sub-components of 2J3KL cod continue for the foreseeable future.**

2) **The FRCC recommends that to reduce by-catch and disturbances to spawning and juvenile cod, experimental "cod boxes" be established in the Hawke Channel and Tobin's Point-Bonavista Corridor areas, and that all forms of commercial fishing (except crab pots) and invasive human activity having potential to harm or disturb fish (seismic) be prohibited therein.**

3) **The FRCC recommends that to better inform management about the success of the "cod boxes" in rebuilding cod, the boxes be used for scientific research purposes to assist in the investigation of ecosystem processes pertinent to the fisheries.**

4) **The FRCC recommends that to reduce fishing mortality on capelin, in recognition of its importance to the cod diet, that directed fisheries for capelin be prohibited in all areas outside the coastal zone (to be defined later).**

5) **The FRCC recommends that to eliminate incentives for by-catch, that all cod by-catch in offshore areas of 2J3KL be brought in and forfeited to the Crown (without penalty). Any discarding would be illegal. If possible, derived funds should support science related to Bank cod.**

6) **The FRCC recommends that to reduce natural mortality in cod, that harp seal harvest management plans include progressive reductions in herd size to levels that will not compromise seal conservation or the seal hunt.**

7) **The FRCC recommends that to better understand the fisheries ecosystem of the northern cod, that an expansion of ecosystem-level research be implemented that will at once assess the effectiveness of the various conservation methods, and the role of pelagic fishes and seals, both harps and hoods (for which no current census or diet data exist), as they relate to diets and predation of groundfish stocks.**

8) **The FRCC recommends an ecosystem-level approach that will of necessity involve a unity of management measures (e.g., moratorium and forfeit of any by-catch) both inside and outside the EEZ.**

9) **The FRCC recommends that to judge the progress towards rebuilding cod, after the initial 5-year period, that a full review be undertaken of the conservation methods, their success towards rebuilding cod, and of any effects on other fisheries.**

Coastal Stock Components

The coastal component of the northern cod has fared better than the shelf components since the moratorium. Stock growth was good in the 1990s but in the past few years all abundance indices have declined (including the sentinel fishery, the FFAW survey, the inshore trawl survey index, log books, and the acoustic survey of Smith Sound). The increasing biomass was supported by the 1990 and 1992 year-classes, but during the mid-1990s recruitment was lower. There is some evidence of stronger recruitment in the late 1990s (likely produced by the 1990 and 1992 year-classes). Acoustic surveys suggest that mortality rates have increased in recent years. Old harp seals are now present year-round near the cod concentrations. Tagging studies indicate fishing mortality is increasing. There has been **an increasing concentration of fish in Trinity and Bonavista Bays**. The Index fishery caught 3600 t in 2002, with approximately 2000 t coming from Trinity Bay and adjacent regions of Bonavista Bay. The reduction in the Smith Sound survey index lags the other indices, which suggests concentration of remaining fish as the stock declines.

The FRCC believes that current methods and management of the coastal sub-stock of northern cod inhibit: 1) decision making close to the fisheries; 2) effective involvement of resource users, and 3) the capacity for users to take on new responsibilities. Hence current management is judged to be incompatible with the development of a sustainable fishery, such as existed in Newfoundland and Labrador historically. In keeping with this belief, the FRCC is recommending that a new supplementary management structure be put into place that puts local decision making as close as possible to the fisheries and the resource users, and transfers stewardship and designated responsibility to the local and community level.

Coastal Fisheries Councils: A new model for stewardship and responsibility for the inshore fisheries

The FRCC is convinced that successful management of cod and other coastal fisheries (e.g., capelin) can only be achieved if fishers take responsibility for the stewardship of local resources and buy-in to the need for conservation. Moreover, there must be fundamental change in the attitudes and roles of fishers, communities and the management regime if rural communities and their fisheries are to survive. For fishers, the transition from being "fish killers" to "fish stewards" will be difficult but not impossible, and has many precedents in resource management. Without this transition, the FRCC sees little future for the inshore fishery.

The FRCC is also convinced that a cod closure under the current management regime, without buy-in from communities, would not lead to conservation of the resource. Closure would decrease the stake of fishers and communities in future fisheries, which in turn could lead to less attention to conservation, with attendant increases in by-catch, discarding, poaching and abuse, that could ultimately lead to the final demise of the Northern cod stock. Commercial fishers no longer have any stake in the Atlantic salmon resource, and the FRCC has been told repeatedly that there is little stewardship of this resource by commercial fishermen as a direct result of there exclusion of the fisheries.

The FRCC proposes the formation of Coastal Fisheries Councils that would result in operational decision making for coastal fisheries being made by resource users. Local fisheries decision making is not new to Newfoundland and Labrador. The FRCC believes that a part of the solution to the current crisis is to revive this long-standing tradition. There are modern precedents and models from which we can learn. In Nova Scotia, Community Management Boards are in place and provide operational decision for local fisheries. On a broader front, Sea fisheries committees have responsibilities for all local fishing within a 6-mile zone of England and Wales. There are other working examples from Australia and other countries wherein local knowledge is harnessed.

Coastal Fisheries Councils would not replace but enhance the abilities of existing DFO science, management, and enforcement to foster a sustainable fishery. The DFO would provide science, higher-level management and enforcement. However, some modifications of current roles are envisioned. For example, representatives from science, management and enforcement could be attached to each Council to assist interpretations and applications of the broader dictates such as TACs and management as set by DFO. An important role of the Councils would be in recognizing any local problems with poor fishing practices and poaching. The specific responsibilities of the Councils should be worked out after consultations between DFO, the provincial government and present fisheries committees and industry. It may be expected that the first order of business for the Councils would be to assist in the specification of by-catch levels for cod, and to allocate those by-catches among their fishers. In addition, early responsibilities would be to determine whether any allocation of capelin quota be fished within their regions, and to determine the best ways to reduce predation by seals.

Special Issues

Most fishermen expressed the view that a closure of the fishery would not result in a reduction in the true fishing mortality, as a result of the perception of a loss of stake in future fisheries.

The recreational fishery in Newfoundland and Labrador is likely to have had a significant impact on the 2J3KL cod stock (with catches as high as 1800 t per year). During the period of crisis management, the FRCC does not support a recreational fishery.

Fishermen and industry are very concerned about widespread illegal fishing. The FRCC believes that such practices will not stop under current management, and that only with effective local management and buy-in to conservation will such practices be curtailed.

The FRCC is strongly of the view that for conservation, how the fishery is prosecuted is as important as the quota. We must always distinguish what is really happening to the stock and what is happening only on paper.

Seal predation

Mortality of northern cod caused by harp and hooded seals continues to be a major concern of the FRCC. Recent consumption estimates for harps are approximately 37,000t of Atlantic cod, 893,000t of capelin, and 185,000t of Arctic cod. There are no estimates of consumption by hoods. Mortality inflicted by "belly-feeding" is not included in these estimates, and continues to be observed in several coastal areas. The **SSR has concluded that seal predation is limiting cod recovery.** Cod over-wintering in coastal areas are very vulnerable to predation mortality, especially given the cold waters which slow cod metabolism and expose them to the risk of freezing if chased into sub-zero temperatures. Seal numbers have increased substantially in Smith Sound in the past 3 years. **That seals should be able to feed on and molest the last remaining large aggregations of northern cod is unconscionable and unacceptable to the FRCC. The FRCC is also concerned about hooded seal numbers and the lack of adequate diet sampling on harp and hooded seals on the banks and shelf. This lack of information is not satisfactory in this time of crisis.**

Fishermen believe that older harp seals are reducing the spawning potential of the stock, and are recommending that seals be controlled in areas where seals are destroying cod in large numbers.

Capelin

The trend in biomass of capelin, the major prey of cod in this area, has been uncertain since the late 1980s. The SSR expresses concern that rebuilding in cod may be reduced by a lack of a oil-rich food source (capelin) particularly in the offshore and to the north. Fishermen have expressed concern about the capelin fishery. Many fishermen believe that the abundances of capelin and cod are intrinsically linked and that cod will only recover when capelin is again abundant in 2J3KL.

Enhancement

The FRCC believes that a more pro-active approach to rebuilding should be undertaken. Consideration should be given to experimental reseeding of presently vacant coastal fjords with young cod. (FRCC 2002 - ref 2J3KL)

The Next 5 Years or 150,000t (whichever comes first)

The FRCC believes that we must enter a period of crisis management, initially for a period of 5 years. During this period, the objectives are to allow the stock to grow as fast as practical, which implies a reduction in mortality from all sources. Of prime importance is that the mortality from seals must be curtailed. In addition, fishing mortality must be reduced to as low a level as possible. The FRCC stresses that it is the true mortality (the number of fish that are killed) that must be reduced. There is no value in reducing a hypothetical mortality that could result from ineffective catch restrictions. The FRCC has considered 5 possible scenarios for managing the northern cod fishery during this period of crisis management. These are:

1. A total closure, TAC=0, no catch and no by-catch, no sentinel fishery.

2. As per option 1 but with a sentinel fishery.

3. Sentinel only with by-catch (cap of 1000-1500t, with local management).

4. A reduced index, by-catch and sentinel fishery (would require a TAC of at least 2500t).

5. Status Quo with TAC of 5600t.

    1. FRCC believes that a second moratorium would cause a different reaction in fishing communities to the first, because for the first moratorium there was hope of a relatively rapid recovery. There is no such hope now. A second closure could be met with despair and a belief that the fishery would never come back and that the "rights" of inshore fishers would ultimately be forfeited to sport and tourism fisheries. In every consultation the analogy to salmon fisheries was raised. A loss of hope and rights might lead to lack of concern by fishers for the destruction of cod. The FRCC thus believes that this scenario would reduce mortality on paper but not the true mortality at sea. There would be little opportunity to develop Coastal Fisheries Councils under this option.

    2. The continuation of the sentinel fishery seems necessary to science. However, the FRCC believes that the limited nature of such a strategy is likely to promote abuse similar to that outlined under option 1.

    3. The third option is to conduct sentinel fisheries and allow for by-catch in other directed fisheries. Local knowledge of the Coastal Fisheries Councils could be used to minimize such by-catches in all fisheries directed at other species. This strategy would allow other fisheries and be inclusive of all fishers. Coastal Fisheries Councils would assist in operational phases of this strategy such as assigning the allocations optimally among fishers. Under this option there would be no TAC for cod. This approach may be the best way to reduce true fishing mortality. DFO would negotiate by-catch allocations with the Coastal Fisheries Councils, based on the size of local cod populations (as determined by science) and likely by-catch levels in other fisheries. Allocations would be adjusted to reflect successful or unsuccessful conservation and biomass increases or decreases. By-catch would provide a basis for scientific information on stock status. The FRCC suggests that total removals of 1000-1500 t for the full coastal sub-stock would not impede stock growth, as during the mid-1990s the sub-stock grew with removals at this level.

    4. Allowing a small but widespread index fishery in addition to sentinel fisheries and by-catch would require total removals of at least 2500 t. This option might help relieve alienation but IQs would necessarily be very small, and its

limited application (less per boat or fewer boats) and small quotas would risk alienation of fishers. Hence, true fishing mortality might not decline.

5. Keeping of the status quo would inevitably lead to increases in mortality and the destruction of the stock.

The FRCC believes that option 3 is the best way ahead, and is most likely to result in the fullest reduction in true fishing mortality. The FRCC suggests that such a plan be put into place for 5 years, in conjunction with the other measures to reduce total mortality and enhance rebuilding of the northern cod. **The FRCC repeats that it does not endorse the implementation of option 3 without application of the other recommendations, because such an action is unlikely to rebuild the stock, which remains the prime objective.** After 5 years, in 2008, a full re-assessment of the progress of the rebuilding of the coastal and bank sub-stocks would be made by the Coastal Fisheries Councils and DFO stock assessment.

Hence, for the coastal sub-stock:

10) The FRCC recommends that to achieve local buy-in to conservation, and give fishers and communities a stake in local fisheries, that DFO in conjunction with industry develop and implement Coastal Fisheries Councils with responsibilities for fisheries in local regions (at the scale of a Bay or local coast). Councils would have designated operational responsibilities between headlands and a zone within 6 nautical miles of land. Councils should be in place and operational by 2004.

11) The FRCC recommends that to reduce the concentration of fishing mortality in specific areas, that DFO and the Coastal Fishery Councils develop strategies to limit the concentration of fishing effort.

12) The FRCC recommends that to further enhance the stake of fishers and communities in the long-term growth of the northern cod, that the Coastal Fishery Councils become a permanent part of management/ conservation decisions about the full 2J3KL cod stock, in recognition that coastal fisheries historically depended on the migratory Bank sub-stocks.

13) The FRCC recommends that to address immediate management and conservation concerns, that for the 2003 fisheries, a by-catch only cod fishery should be prosecuted in coastal 2J3KL, with caps for each region. Caps would be determined by DFO in consultation with present Fisheries Committees and based on relative local cod stock abundance levels, to be determined from the sentinel and recent index fishery catches, in combination with levels of other directed fisheries in the area. [As a guideline only, the total sentinel and by-catch cap for 2J3KL should not exceed 1500 t.]

14) The FRCC recommends that to address immediate concerns about the harvest of capelin, that for the 2003 fisheries, the capelin fishery should not increase above current levels. Furthermore, no increase should be considered until a full assessment of biomass is made (Coastal Fisheries Councils should have the authority to not allocate any capelin quota within their district).

15) The FRCC recommends that to reduce natural mortality, that areas where cod are aggregated during winter (e.g., Smith Sound) or where seals are inflicting high mortality on cod, be designated as seal exclusion zones. The Coastal Fisheries Councils should assume responsibility for seal control once established.

16) The FRCC recommends that to protect over-wintering and spawning concentrations of fish in Smith Sound, no net fisheries be permitted in Smith Sound or in the 5 mile buffer from December 1 to May 31st for the 5 year crisis management period. A designated Seal Exclusion Zone Control Team should be established immediately to keep seals out of Smith Sound year round.

17) The FRCC recommends that for scientific monitoring, that the sentinel fishery be continued in coastal 2J3KL.

18) The FRCC recommends that to reduce fishing mortality, that no recreational fishery be prosecuted in 2J3KL during the 5-year rebuilding period.

19) The FRCC recommends that to investigate potential methods to enhance stock rebuilding, that DFO in consultation with industry and local and international experts review

existing information and investigate the feasibility of using releases of hatchery raised juvenile cod, or cod "grow out and release" methods, in coastal fjords.

20) The FRCC recommends that to judge the progress towards rebuilding cod, after the initial 5-year period, that a full review be undertaken of the conservation methods, their success towards rebuilding cod, and of any effects on other fisheries.

Council's View of Stock Status

Overall Stock Indicator:	stock at extremely low level compared to historical times.
	Compared to average
Overall biomass:	Bank components extremely low relative to historical levels (1-3%). Coastal components have very high density in Trinity Bay-Bonavista Bay, but it is not known how this relates to historical levels.
Recruitment:	overall very poor, with some improvement for 1997-1999.
Growth and Condition:	body growth and condition has improved, liver condition poor, especially to north, reproduction likely impaired.
Age Structure:	very poor in the shelf components (extreme mortality with few fish older than age 5), improvements in the coastal area during the 1990s receding.
Distribution:	contracted on the Banks, better in the coastal zone but recent contractions to Trinity Bay
Recent Exploitation Level:	nil in 2J, moderate to high in 3K, increasing in 3L

Sources

DFO Science

SSR A2-01 (2003) Northern (2J3KL) Cod

FRCC Consultations

The FRCC held consultations on this stock in:

Twillingate, NL (Dec. 2002)
St. Anthony, NL (Dec. 2002)
Grand Falls, NF (Mar. 2003)
Clarenville, NF (Mar. 2003)
St. John's, NF (Mar. 2003)

Written briefs

Dean Bavington (2002-010-00217)
Fish, Food and Allied Workers – Harvey Jarvis (2003-010-00048)
<35' Cod Fishers – Raymond Wimbleton (2003-010-00049)
Southern Shore Inshore Fishermen's Action Committee – Donald Drew (2003-010-00051)
Fish Harvester's Resource Centres – George Chafe (2003-010-00040)
Lewisporte Yacht Club Inc. – R. Oake (2003-010-00050)
Hickman's Harbour – Gilbert Penney (2003-010-00052)
Fish, Food and Allied Workers – Harvey Jarvis (2003-010-00044)
Hayward Pike (2003-010-00047)
Commercial Fish Harvesters – George Feltham & Gilbert Penny (2003-010-00055)
Fisheries Association of Newfoundland and Labrador Ltd. – Alastair O'Rielly (2003-010-00056)
Gillnet Fish Harvesters – George Chafe (2003-010-00014)
Fish, Food and Allied Workers (2003-010-00053)
Roy Dwyer (2003-010-00010)
NLWF – Arthur Elkins (2003-010-00071)
Petty Harbour Fishermen's Co-Operative – Tom Best (2003-010-00054)

Appendix: FRCC Mandate and Membership

FRCC Terms of Reference

1. Introduction

The Government of Canada is committed to a more comprehensive approach to the conservation and management of our fisheries resource. This approach demands a better understanding of complex fisheries ecosystems - the interaction of fish with other species, predator-prey relationships, and also changes in the marine environment like ocean currents, water temperatures and salinity.

The Government of Canada is also committed to a more effective role in decision-making for those with practical experience and knowledge in the fishery.

The Minister of Fisheries and Oceans has established the Fisheries Resource Conservation Council (FRCC) as a partnership between government, the scientific community and the direct stakeholders in the fishery. Its mission is to contribute to the management of the Atlantic fisheries on a 'sustainable' basis by ensuring that stock assessments are conducted in a multi-disciplined and integrated fashion and that appropriate methodologies and approaches are employed; by reviewing these assessments together with other relevant information and recommending to the Minister total allowable catches (TACs) and other conservation measures, including some idea of the level of risk and uncertainty associated with these recommendations; and by advising on the appropriate priorities for science.

2. Definition of Conservation

Fisheries conservation is that aspect of the management of the fisheries resource which ensures that its use is sustainable and which safeguards its ecological processes and genetic diversity for the maintenance of the resource. Fisheries conservation ensures that the fullest sustainable advantage is derived from the resource and that the resource base is maintained.

3. Council Objectives

3.1 To help the government achieve its conservation, economic and social objectives for the fishery.The conservation objectives include, but are not restricted to:

3.1.1 rebuilding stocks to their 'optimum' levels and thereafter maintaining them at or near these levels, subject to natural fluctuations, and with 'sufficient' spawning biomass to allow a continuing strong production of young fish; and,

3.1.2 managing the pattern of fishing over the sizes and ages present in fish stocks and catching fish of optimal size.

3.2 To develop a more profound understanding of fish-producing ecosystems including the inter-relationships between species and the effects of changes in the marine environment on stocks.

3.3 To review scientific research, resource assessments and conservation proposals, including, where appropriate, through a process of public hearings.

3.4 To ensure that the operational and economic realities of the fishery, in addition to scientific stock assessments, are taken into account in recommending measures to achieve the conservation objectives.

3.5 To better integrate scientific expertise with the knowledge and experience of all sectors of the industry and thus develop a strong working partnership.

3.6 To provide a mechanism for public and industry advice and review of stock assessment information.

3.7 To make public recommendations to the Minister.

4. Mandate and Scope

4.1 The Fisheries Resource Conservation Council will address these objectives by bringing together industry, DFO science and fisheries management, and external scientific and economic expertise in one body.

4.2 The Council will:

4.2.1 advise the Minister on research and assessment priorities;

4.2.2 review DFO data and advise on methodologies;

4.2.3 consider conservation measures that may be required to protect fish stocks;

4.2.4 review stock assessment information and conservation proposals, including through public hearings, where appropriate; and,

4.2.5 make written public recommendations to the Minister on TACs and other conservation measures.

4.3 The Council may recommend any measures considered necessary and appropriate for conservation purposes such as TACs, closure of areas to fishing during specific periods, approaches to avoid catching sub-optimal sized fish or unwanted species, and restrictions on the characteristics or use of fishing gears.

4.4 The Council's scope includes Canadian fish stocks of the Atlantic and Eastern Arctic Oceans. In the first instance, the Council will address groundfish, and then subsequently take on responsibility for pelagic and shellfish species.

4.5 The Council may also advise the Minister on the position to be taken by Canada with respect to straddling and transboundary stocks under the jurisdiction of international bodies such as the Northwest Atlantic Fisheries Organization (NAFO).

5. Size, Structure and Make-Up

5.1 The Council will consist of not more than 14 members with an appropriate balance between 'science' and 'industry'.

5.2 Members are chosen on merit and standing in the community, and not as representatives of organizations, areas or interests.

5.3 'Science' members, are drawn from government departments, universities or international posts, and are of an appropriate mix of disciplines, including fisheries management and economics.

5.4 'Industry' members are knowledgeable of fishing and the fishing industry and understand the operational and economic impacts of conservation decisions.

5.5 All members of the Council are appointed by the Minister.

5.6 All members, including the Chairperson, are appointed for a three year term; terms can be renewed.

5.7 Members appointed from DFO serve 'ex officio'.

5.8 Members have to disclose any interest in the Atlantic or Eastern Arctic fishery and take appropriate measures so as to avoid potential or real conflict of interest situations during the term of appointment.

5.9 The four Atlantic Provinces, Quebec and Nunavut may each nominate one delegate to the Council. These delegates have access to the Council's information, and may participate fully in meetings, but will not be asked to officially endorse the formal recommendations to the Minister.

5.10 The Council is supported by a small Secretariat, to be located in Ottawa. The Secretariat will:

5.10.1 provide administrative support for the functioning of the Council;

5.10.2 provide a technical science and fisheries management support;

5.10.3 organize Council meetings;

5.10.4 record decisions of the Council;

5.10.5 undertake a professional communications function for the Council, providing a central point for communications to and from the Council; and

5.10.6 undertake such other matters as from time to time might be appropriate.

5.11 The Chairman may appoint an Executive Committee, consisting of the Chairman, Vice-Chairman, and three other Members.

5.12 In addition, the Chairman may, from time to time, strike an 'ad hoc' committee to deal with a specific issue.

6. Activities:

6.1 Reviews appropriate DFO science research programs and recommends priorities, objectives and resource requirements.

6.2 Considers scientific information - including biology, and physical and chemical oceanography, taking into account fisheries management, fishing practices, economics and enforcement information.

6.3 Conducts public hearings wherein scientific information is presented and/or proposed conservation measures/options are reviewed and discussed.

6.4 Recommends TACs and other conservation measures.

6.5 Prepares a comprehensive, long-term plan and a work plan for the Council which are reviewed annually at a workshop with international scientists and appropriate industry representatives.

6.6 Ensures an open and effective exchange of information with the fishing industry and contributes to a better public understanding of the conservation and management of Canada's fisheries resource.

FRCC MEMBERSHIP:

Members:

Fred Woodman, Chairman
Jean Guy d'Entremont, Vice-Chair
Maurice Beaudin
Bill Broderick
Bruce Chapman
Guy Cormier
Nick Henneberry
Douglas Johnston
Dan Lane
Jean-Jacques Maguire
Paul Nadeau
John Pope
George Rose
Karl Sullivan

Provincial Delegates:

Carey Bonnell, Nunavut
Mario Gaudet, New Brunswick
David MacEwen, Prince Edward Island
Dario Lemelin, Québec
Tom Dooley, Newfoundland and Labrador
Clary Reardon, Nova Scotia

Ex Officio:

Gilles Belzile
Barry Rashotte
David Gillis

Secretariat:

Arthur Willett, Executive Director
Tracey Sheehan
Helena Da Costa
Debra Côté

Acronyms

CPUE: Catch per unit of effort

DFO: Department of Fisheries and Oceans

FRCC: Fisheries Resource Conservation Council

GEAC: Groundfish Enterprise Allocation Council

IFMP: Integrated Fisheries Management Plan

ITQ: Individual Transferable Quotas

IVQ: Individual Vessel Quotas

MPA: Marine Protected Area

NAFO: Northwest Atlantic Fisheries Organization

PA: Precautionary Approach

RAP: Regional Advisory Process

RV: Research Vessel

SSB: Spawning Stock Biomass

SSR: Stock Status Report

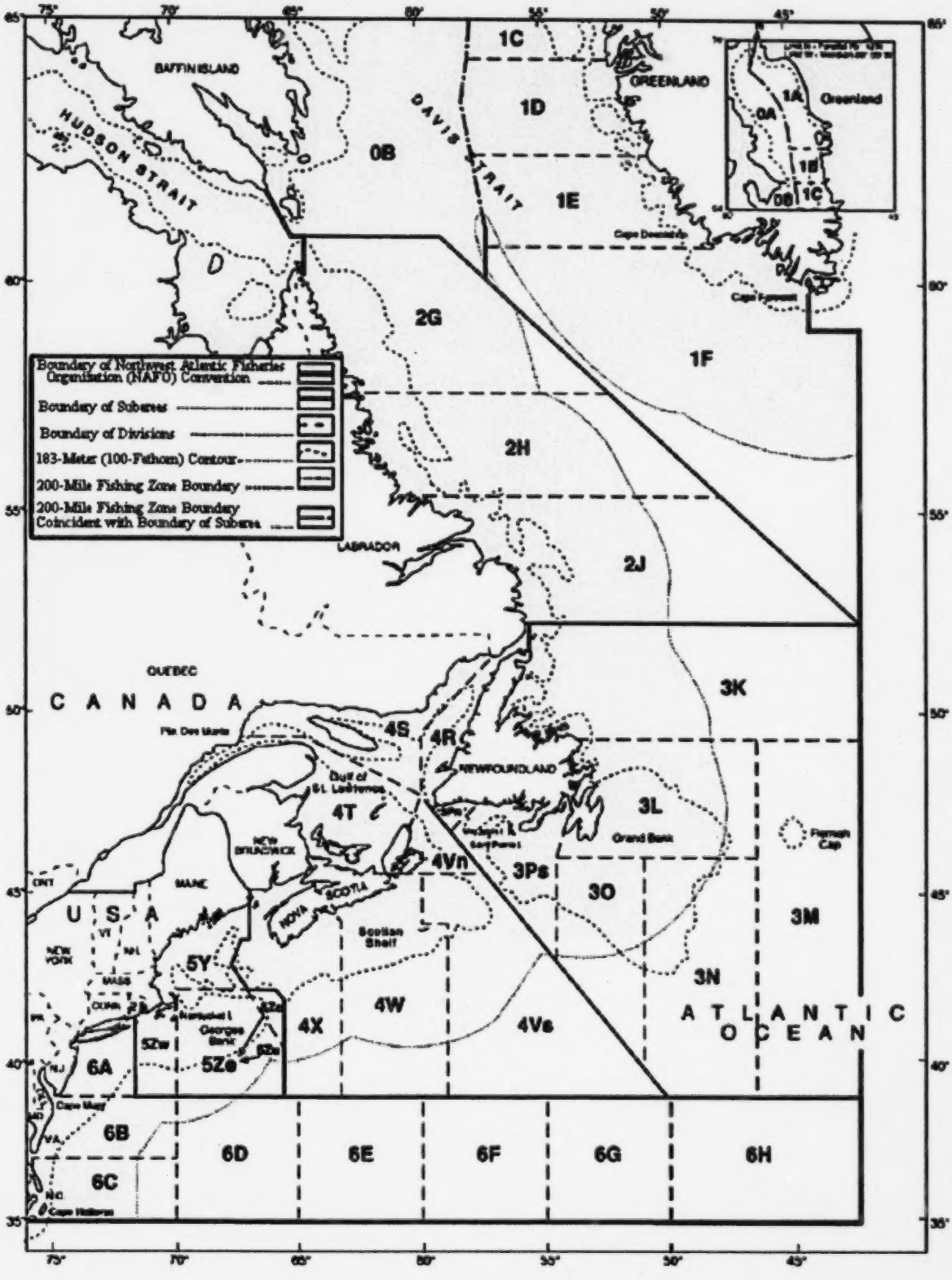
TAC: Total Allowable Catch

TAGS: The Atlantic Groundfish Strategy

VPA: Virtual Population Analysis

ZAP: Zonal Assessment Process

200 Mile Fishing Zone and NAFO Fishing Boundaries



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